

AMENDMENTS TO THE CLAIMS

Please amend claims 31, 32, 36, 39, 40, 41, 47 and 48 as shown below. A complete listing of the claims, including their current status, is provided below:

1-30. (Withdrawn)

31. (Currently amended) A process for preparing a solid support capable of adsorbing a biomolecule, comprising:

(a) providing a solid support comprising a surface coating having a surface reactive site; ~~thereon, and~~

(b) contacting the surface coating with a plurality of monomers; and

(c) polymerizing said monomers to ~~polymerizable composition under polymerizable conditions to produce a~~ solid support having a surface tethered polymer covalently linked to said surface coating, said surface tethered polymer having ~~with~~ at least one adsorbing ~~absorbing moiety for~~ adsorbing ~~absorbing~~ a biomolecule.

32. (Currently amended) The process of claim 31, wherein a portion of said biomolecule is ~~endogenous~~ exogenous to said biomolecule ~~thereto~~.

33. (Original) The process of claim 31, wherein a portion of said biomolecule is an exogenous linking moiety.

34. (Original) The process of claim 31, wherein said polymer is substantially linear.

35. (Original) The process of claim 31, wherein said polymer is a vinyl polymer.

36. (Currently amended) The process of claim 31, wherein said adsorbing ~~absorbing~~ moiety is an amine group.

37. (Original) The process of claim 35, wherein said vinyl polymer is a poly-(vinylamine).

38. (Original) The process of claim 31, wherein said biomolecule comprises an oligonucleotide or polynucleotide.

39. **(Currently amended)** The process of claim 31, further comprising polymerizing an additional non-nucleotidic polymer tethered to said surface coating, said non-nucleotidic polymer comprising additional adsorbing moieties for adsorbing ~~absorbing~~ additional biomolecules.

40. **(Currently amended)** A process for preparing a solid support containing a probe biomolecule capable of hybridization to a target species, comprising:

(a) providing a solid support comprising a surface coating having surface reactive sites,

(b) contacting the surface coating with a plurality of monomers; and

(c) polymerizing said monomers to ~~polymerizable composition under polymerization conditions to produce~~ a solid support having a surface tethered polymer covalently linked to said surface coating, said surface tethered polymer having thereon, wherein ~~the polymerization composition is such that the surface tethered polymer has~~ adsorbing sites for adsorbing biomolecules, wherein said surface tethered polymer is capable of assuming a plurality of conformations; and ~~further wherein the polymer backbone~~ exhibits sufficient mobility and flexibility such that the number of biomolecules adsorbed by the adsorbing moieties is maximized; and

(d) ~~(b)~~ contacting the surface tethered polymer with the probe biomolecule.

41. **(Currently amended)** The process of claim 40, wherein a portion of said biomolecule is endogenous exogenous to said biomolecule thereto.

42. **(Original)** The process of claim 40, wherein a portion of said biomolecule is an exogenous linking moiety.

43. **(Original)** The process of claim 40, wherein said polymer backbone is substantially linear.

44. **(Original)** The process of claim 40, wherein said polymer is a vinyl polymer.

45. **(Original)** The process of claim 40, wherein said adsorbing moieties are amine groups.

46. **(Original)** The process of claim 42, wherein said vinyl polymer is a poly-(vinylamine).

47. **(Currently amended)** The process of claim ~~40~~ 38, wherein said biomolecule comprises an oligonucleotide or polynucleotide.

48. **(Currently amended)** The process of claim 40, further comprising polymerizing an additional non-nucleotidic polymer tethered to said surface coating, said non-nucleotidic polymer comprising additional adsorbing moieties adapted to adsorb an additional biomolecule.